

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 03/11598

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F01N3/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 058 380 A (KLINK HORST ET AL) 22 October 1991 (1991-10-22) the whole document ---	1-22
X	PATENT ABSTRACTS OF JAPAN vol. 002, no. 091 (M-028), 26 July 1978 (1978-07-26) & JP 53 059128 A (NIPPON SOKEN INC), 27 May 1978 (1978-05-27) abstract figures 1-6 ---	1-3, 10, 14-16, 21, 22
A	US 5 154 894 A (MACFARLANE GLEN R ET AL) 13 October 1992 (1992-10-13) abstract figures 1-4 -----	1-22



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

3 June 2004

Date of mailing of the international search report

14/06/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Ikas, G

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/11598

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5058380	A	22-10-1991	DE 3907776 A1 DE 58905552 D1 EP 0386328 A2 ES 2042945 T3 JP 2271023 A	13-09-1990 14-10-1993 12-09-1990 16-12-1993 06-11-1990
JP 53059128	A	27-05-1978	NONE	
US 5154894	A	13-10-1992	NONE	